

REMARKS UNDER 35 USC § 102(e)

The invention is differentiated from Long and Decost. Instead of using an alpha channel only for compositing the output of the image processing filter on top of the source image, the alpha channel is passed to the filter as an additional input, allowing the results of the filter to change depending on the alpha channel.

The method described in claim 2 is not described in Decoste. Section(e) of 35 U.S.C. § 102 provides that:

A person shall be entitled to a patent unless –

(e) the invention was described in ... (2) a patent granted on an application for patent by another filed in the United States ...

The examiner notes that Decoste teaches a soft brush edge having an adjustable gradient that gives the edge a soft or fuzzy appearance (column 14 lines 63-67, column 15 lines 1-24). Unlike Decoste, which teaches reducing the transparency of the edges of a brush stroke, the applicant's invention teaches reducing the transparency of the edges of the selected media image. When viewed with the rest of claim 2, it is apparent that the particular genius of the applicant's invention is that it allows the media image to be selected in such a way that the edges of the selection have reduced transparency, so that the selected image can be applied to the paint layer and change the brightness of the paint layer based on the varied transparency values of the media image selected in this novel fashion. As shown in the drawings, the selected media image, with the opaque edges, can be added to a paint layer (such as a fire texture) so that the center of the image (the more transparent part) has the bright, combinatorial effect of showing the fire texture and the image and the edges of the image (the more opaque part) does not allow much or any of the paint layer to bleed through. Replicating this effect using the methods described in Decoste

would be a tedious process of applying increasingly transparent brush strokes radiating outward, requiring constant adjustment of the brush transparency. The applicant's invention simply requires three easy steps. Providing a paint layer of the desired type, selecting the image such that the edges of the selected image are less transparent and combining the two, a method clearly superior to that taught be Decoste.

Decoste merely teaches the common feature of many paint programs, that of opening an image and painting on it with a brush, producing a wholly different effect than that of the applicant's new method. This is obvious from viewing figure 14, which provides for the altering of brush characteristics, not selected image characteristics.

UNDER 35 USC § 102(b)

Claims 3 and 4 are not anticipated by Long.

Claim 3 teaches providing an alpha channel having alpha channel pixels which are spatially equivalent to the source pixels. Examiner notes that Long teaches the use of a k coefficient for transparency, but this is not the same as an alpha channel with corresponding spatially equivalent pixels. Applicant's invention allows the user to define a whole series of alpha channel values, brighten the values defined across the alpha channel, which is spatially equivalent to the source channel, and then cause the edges of the defined values to have less transparency. This is not the same as painting with a soft-edged brush. Painting with a soft edged brush produces strokes which may or may not have less transparency at the edges. The applicant's invention allows for the reducing of transparency around the entire edges of an area defined by the alpha channel, necessarily distinct from reducing the transparency of the edges of

a brush stroke about to be applied. No where does Long teach the alteration of an image defined by the alpha channel, after the image has been defined.

Claim 4 teaches an embossing effect comprising embossing the pixels in the alpha channel, using a result of the embossing for changing brightness of the selected color, and providing highlights to the selected colors, thereby providing a sense of depth. The examiner cites column 5 lines 35-51, and makes the determination that modifying alpha channel pixel values is the equivalent to an embossing effect. It is not. To claim that Long's "modifying alpha channel pixel values" teaches all effects obtained by alteration of alpha channel values would be applying overbroad interpretation. The applicant claims a specific effect, embossing, not taught by Long. This effect is obtained by a specific alteration of pixels including applying highlights to the altered pixels to produce the effect of depth.

The examiner also notes that changing the color value meets the claimed limit of embossing and that multiple layers of brush strokes meet the claimed limitation of providing a sense of depth due to the embossing. However, to get multiple layers of brush strokes to replicate the embossing effect, while possible, is tedious and time consuming, and applicant's embossing effect, a new method, produces the same result in a fraction of the time, a superior and novel method.

UNDER 35 USC § 103(a)

The limitations of Claim 1 are not obvious under Long. Long, as the examiner notes, is silent on the limitation of "(f) User-activated means for copying the primary pixel values stored in the primary buffer to the secondary pixel values stored in the secondary buffer." While Long may teach providing a means for copying pixel values from the primary buffer to the secondary buffer, Long does not teach a user-activated means for doing such. Nor would such a

modification have been obvious. Long's method automatically updates the secondary buffer, but the applicant's invention allows a user-activated update of such, permitting the user to determine when the secondary buffer is to be updated with changed pixels, thus facilitating a greater degree of control with UNDO-like functions, since the buffers are not both constantly automatically updated.

Neither are the limitations of claims 5-8 obvious under Long. Claim 5 teaches storing tertiary values for pixels representing the same region [as the primary and secondary buffer] in a user-modifiable alpha channel. Long teaches the use of an alpha coefficient, k , to produce pixels of more or less transparency. While storing of alpha values for pixels is taught in Long, the alpha values are modifiable only as they are applied. Long only teaches pre-application modification of alpha values to be stored, which is to say, the edges of a brush stroke can be modified for transparency prior to application, but Long does not teach post stroke application modification of the alpha channel values. Essentially, the alpha channel is not user-modifiable in and of itself, the values stored therein can only be modified by the application of an additional brush stroke.

Claims 6-8 are necessarily unique from Long as well, as they depend on unique claim 5.

Additionally, claim 6 teaches causing the edges of the selected media image to have less transparency. As in claim 3, this method is not taught by Long. Applicant's invention allows the user to, with a single step, cause the edges of the selected image to have less transparency. This stems from applicant's method of modifying the alpha channel. Long would require, if it provides for this at all, a series of brush strokes on the paint layer with less transparency, which would then be combined with the media image, to cause the edges of the media image to look as though it had more transparency. A wholly different and more inefficient process than

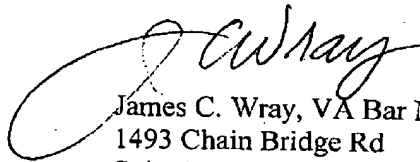
applicant's method of simply increasing the transparency of the edges of the selected media image.

Claim 7 teaches the wholesale modification of the alpha channel values at any point, not only as brush strokes are being applied. Nowhere does Long teach such a method. Long allows the user to define alpha channel values as strokes are applied, but once the strokes have been applied, the values cannot be altered, but by another stroke. Applicant's invention allows for modification of the alpha channel values whenever the user so desires, permitting the user to decrease transparency around the edges of an image defined by the alpha channel post brush stroke application.

CONCLUSION

Reconsideration and allowance are respectfully requested.

Respectfully,



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